

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-87 (Canceled)

Claim 88 (Currently amended): An antigenic composition ~~comprising~~ consisting of an antigen and an effective adjuvanting amount of the combination of: (1) 3-O-deacylated monophosphoryl lipid A or monophosphoryl lipid A ~~and derivatives and analogs thereof,~~ and (2) a cytokine or lymphokine, ~~or an agonist or antagonist to said cytokine or lymphokine, wherein the combination of adjuvants enhances the immune response in a vertebrate host to said antigen~~ selected from the group consisting of granulocyte macrophage colony stimulating factor (GM-CSF) and interleukin-12 (IL-12), together with a diluent or carrier.

Claim 89 (Currently amended): The antigenic composition of claim 88, where the ~~selected~~ antigen is a polypeptide, peptide or fragment derived from a protein.

Claim 90 (Original): The antigenic composition of claim 88, where 3-O-deacylated monophosphoryl lipid A is used in the form of a stable oil-in-water emulsion.

Claims 91-97 (Canceled)

Claim 98 (Original): The antigenic composition of claim 88, where the antigen is derived from a pathogenic virus.

Claim 99 (Original): The antigenic composition of claim 88, where the antigen is derived from a pathogenic bacterium.

Claim 100 (Original): The antigenic composition of claim 88, where the antigen is derived from a pathogenic fungus.

Claim 101 (Original): The antigenic composition of claim 88, where the antigen is derived from a pathogenic parasite.

Claim 102 (Original): The antigenic composition of claim 88, where the antigen is derived from a cancer cell or tumor cell.

Claim 103 (Original): The antigenic composition of claim 88, where the antigen is derived from an allergen.

Claim 104 (Original): The antigenic composition of claim 88, where the antigen is derived from A β protein or peptide thereof, or an antibody thereto.

Claim 105 (Currently amended): A method for increasing the ability of an antigenic composition containing ~~a selected~~ an antigen from a pathogenic virus to elicit ~~the~~ an immune response ~~of in~~ in a vertebrate host against said pathogenic virus, which comprises administering to said host an antigenic composition of claim 98.

Claim 106 (Currently amended): A method for increasing the ability of an antigenic composition containing ~~a selected~~ an antigen from a pathogenic bacterium to elicit ~~the~~ an immune response ~~of in~~ in a vertebrate host against said pathogenic bacterium, which comprises administering to said host an antigenic composition of claim 99.

Claim 107 (Currently amended): A method for increasing the ability of an antigenic composition containing ~~a selected~~ an antigen from a pathogenic fungus to elicit ~~the~~ an immune response ~~of in~~ in a vertebrate host against said pathogenic fungus, which comprises administering to said host an antigenic composition of claim 100.

Claim 108 (Currently amended): A method for increasing the ability of an antigenic composition containing ~~a selected~~ an antigen from a pathogenic parasite to elicit ~~the~~ an immune response ~~of in~~ in vertebrate host against said pathogenic parasite, which comprises administering to said host an antigenic composition of claim 101.

Claim 109 (Currently amended): A method for increasing the ability of an antigenic composition containing ~~a selected~~ an antigen from a pathogenic virus to elicit cytotoxic T lymphocytes responses in a vertebrate host, which comprises administering to said host an antigenic composition of claim 98.

Claim 110 (Currently amended): A method for increasing the ability of an antigenic composition containing ~~a selected~~ an antigen from a pathogenic bacterium to elicit cytotoxic T lymphocytes responses in a vertebrate host, which comprises administering to said host an antigenic composition of claim 99.

Claim 111 (Currently amended): A method for increasing the ability of an antigenic composition containing ~~a selected~~ an antigen from a pathogenic fungus to elicit cytotoxic

T lymphocytes responses in a vertebrate host, which comprises administering to said host an antigenic composition of claim 100.

Claim 112 (Currently amended): A method for increasing the ability of an antigenic composition containing a ~~selected~~ an antigen from a pathogenic parasite to elicit cytotoxic T lymphocytes responses in a vertebrate host, which comprises administering to said host an antigenic composition of claim 101.

Claim 113 (Currently amended): A method for increasing the ability of an antigenic composition containing a ~~selected~~ cancer antigen or tumor-associated antigen from a cancer cell or tumor cell to elicit a therapeutic or prophylactic anti-cancer effect in a vertebrate host, which comprises administering to said host an antigenic composition of claim 102.

Claim 114 (Currently amended): A method for increasing the ability of an antigenic composition containing a ~~selected~~ an allergen to moderate an allergic response in a vertebrate host, which comprises administering to said host an antigenic composition of claim 103.

Claim 115 (Original): A method for increasing the ability of an antigenic composition to prevent or treat disease characterized by amyloid deposition in a vertebrate host, which comprises administering to said host an antigenic composition of claim 104.

Claim 116 (Currently amended): The antigenic composition of claim 98, where the ~~selected~~ antigen is from human immunodeficiency virus (HIV).

Claim 117 (Currently amended): The antigenic composition of claim 116, where the ~~selected~~ HIV antigen is an HIV protein, polypeptide, peptide or fragment derived from said protein.

Claim 118 (Currently amended): The antigenic composition of Claim 117 where the ~~selected antigens are~~ antigen is the HIV peptides having the amino acid sequence:
Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala Cys Thr Arg Pro Asn
Tyr Asn Lys Arg Lys Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys (SEQ ID NO:1), or
Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala Cys Thr Arg Pro Asn
Tyr Asn Lys Arg Lys Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys (SEQ ID NO:2).

Claim 119 (Original): The antigenic composition of claim 116, where 3-O-deacylated monophosphoryl lipid A is used in the form of a stable oil-in-water emulsion.

Claims 120-126 (Canceled)

Claim 127 (Currently amended): The antigenic composition of claim 98, where the ~~selected~~ antigen is from simian immunodeficiency virus (SIV).

Claim 128 (Currently amended): The antigenic composition of claim 127, where the ~~selected~~ SIV antigen is an SIV protein, polypeptide, peptide or fragment derived from said protein.

Claim 129 (Currently amended): The antigenic composition of claim 128, where the ~~selected~~ antigen is an SIV peptide selected from the peptides consisting of the amino acid sequences: Cys Thr Pro Tyr Asp Ile Asn Gln Met (SEQ ID NO:3), Ser Thr Pro Pro Leu Val Arg Leu Val (SEQ ID NO:4), Tyr Ala Pro Pro Ile Ser Gly Gln Ile (SEQ ID NO:5), Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile Glu Pro Leu Gly Val Ala Pro Thr Lys Ala Cys Thr Pro Tyr Asp Ile Asn Gln Met (SEQ ID NO:7), Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile Glu Pro Leu Gly Val Ala Pro Thr Lys Ala Ser Thr Pro Pro Leu Val Arg Leu Val (SEQ ID NO:8) and Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile Glu Pro Leu Gly Val Ala Pro Thr Lys Ala Tyr Ala Pro Pro Ile Ser Gly Gln Ile (SEQ ID NO:9).

Claim 130 (Original): The antigenic composition of claim 127, where 3-O-deacylated monophosphoryl lipid A is used in the form of a stable oil-in-water emulsion.

Claims 131-137 (Canceled)

Claim 138 (Currently amended): The antigenic composition of claim 99, where the ~~selected~~ antigen is from *Neisseria gonorrhoeae*.

Claim 139 (Currently amended): The antigenic composition of claim 138, where the ~~selected~~ *Neisseria gonorrhoeae* antigen is a *Neisseria gonorrhoeae* protein, polypeptide, peptide or fragment derived from said protein.

Claim 140 (Currently amended): The antigenic composition of claim 139, where the ~~selected~~ antigen is the *Neisseria gonorrhoeae* Porin B protein.

Claim 141 (Original): The antigenic composition of claim 138, where 3-O-deacylated monophosphoryl lipid A is used in the form of a stable oil-in-water emulsion.

Claims 142-148 (Canceled)

Claim 149 (Currently amended): The antigenic composition of claim 98, where the ~~selected~~ antigen is from human ~~Respiratory~~ respiratory syncytial virus (RSV).

Claim 150 (Currently amended): The antigenic composition of claim 149, where the ~~selected~~ RSV antigen is an RSV protein, polypeptide, peptide or fragment derived from said protein.

Claim 151 (Currently amended): The antigenic composition of claim 150, where the ~~selected~~ antigen is the RSV fusion (F) protein.

Claim 152 (Original): The antigenic composition of claim 149, where 3-O-deacylated monophosphoryl lipid A is used in the form of a stable oil-in-water emulsion.

Claims 153-159 (Canceled)

Claim 160 (Currently amended): A method for increasing the ability of an antigenic composition containing an HIV antigen to elicit ~~the~~ an immune response to said antigen in of a vertebrate host, which comprises administering to said host an antigenic composition of claim 116.

Claim 161 (Canceled)

Claim 162 (Currently amended): The method of claim ~~161~~ 160, where the HIV antigen is the HIV peptide having the amino acid sequence:

Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala Cys Thr Arg Pro Asn
Tyr Asn Lys Arg Lys Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys (SEQ ID
NO:1).

Claim 163 (Currently amended): The method of claim ~~161~~ 160, where the HIV antigen is the HIV peptide having the amino acid sequence:

Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala Thr Arg Pro Asn Tyr
Asn Lys Arg Lys Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys (SEQ ID NO:2).

Claim 164 (Currently amended): A method for increasing the ability of an antigenic composition containing an HIV antigen to elicit cytotoxic T lymphocytes responses in a

vertebrate host, which comprises administering to said host an antigenic composition of claim 116.

Claim 165 (Canceled)

Claim 166 (Currently amended): The method of claim ~~165~~ 164, where the HIV antigen is the HIV peptide having the amino acid sequence:

Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala Cys Thr Arg Pro Asn Tyr Asn Lys Arg Lys Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys (SEQ ID NO:1).

Claim 167 (Currently amended): The method of claim ~~165~~ 164, where the HIV antigen is the HIV peptide having the amino acid sequence:

Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala Thr Arg Pro Asn Tyr Asn Lys Arg Lys Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys (SEQ ID NO:2).

Claim 168 (Currently amended): A method for increasing the ability of an antigenic composition containing an SIV antigen to elicit ~~the an~~ an immune response to said antigen in of a vertebrate host, which comprises administering to said host an antigenic composition of claim 127.

Claim 169 (Canceled)

Claim 170 (Currently amended): The method of claim ~~169~~ 168, where the SIV antigen is an SIV peptide selected from the peptides consisting of the amino acid sequences: Cys Thr Pro Tyr Asp Ile Asn Gln Met (SEQ ID NO:3), Ser Thr Pro Pro Leu Val Arg Leu Val (SEQ ID NO:4), Tyr Ala Pro Pro Ile Ser Gly Gln Ile (SEQ ID NO:5), Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile Glu Pro Leu Gly Val Ala Pro Thr Lys Ala Cys Thr Pro Tyr Asp Ile Asn Gln Met (SEQ ID NO:7), Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile Glu Pro Leu Gly Val Ala Pro Thr Lys Ala Ser Thr Pro Pro Leu Val Arg Leu Val (SEQ ID NO:8) and Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile Glu Pro Leu Gly Val Ala Pro Thr Lys Ala Tyr Ala Pro Pro Ile Ser Gly Gln Ile (SEQ ID NO:9).

Claim 171 (Currently amended): A method for increasing the ability of an antigenic composition containing an SIV antigen to elicit cytotoxic T lymphocytes responses in a vertebrate host, which comprises administering to said host an antigenic composition of claim 127.

Claim 172 (Canceled)

Claim 173 (Currently amended): The method of claim ~~172~~ 171, where the SIV antigen is an SIV peptide selected from the peptides consisting of the amino acid sequences: Cys Thr Pro Tyr Asp Ile Asn Gln Met (SEQ ID NO:3), Ser Thr Pro Pro Leu Val Arg Leu Val (SEQ ID NO:4), Tyr Ala Pro Pro Ile Ser Gly Gln Ile (SEQ ID NO:5), Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile Glu Pro Leu Gly Val Ala Pro Thr Lys Ala Cys Thr Pro Tyr Asp Ile Asn Gln Met (SEQ ID NO:7), Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile Glu Pro Leu Gly Val Ala Pro Thr Lys Ala Ser Thr Pro Pro Leu Val Arg Leu Val (SEQ ID NO:8) and Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile Glu Pro Leu Gly Val Ala Pro Thr Lys Ala Tyr Ala Pro Pro Ile Ser Gly Gln Ile (SEQ ID NO:9).

Claim 174 (Currently amended): A method for increasing the ability of an antigenic composition containing a *Neisseria gonorrhoeae* antigen to elicit ~~the an~~ an immune response to said antigen in of a vertebrate host, which comprises administering to said host an antigenic composition of claim 138.

Claim 175 (Canceled)

Claim 176 (Currently amended): The method of claim ~~175~~ 174, where the *Neisseria gonorrhoeae* antigen is the *Neisseria gonorrhoeae* Porin B protein.

Claim 177 (Currently amended): A method for increasing the ability of an antigenic composition containing a *Neisseria gonorrhoeae* antigen to elicit cytotoxic T lymphocytes responses in a vertebrate host, which comprises administering to said host an antigenic composition of claim 138.

Claim 178 (Canceled)

Claim 179 (Currently amended): The method of claim ~~178~~ 177, where the *Neisseria gonorrhoeae* antigen is the *Neisseria gonorrhoeae* Porin B protein.

Claim 180 (Currently amended): A method for increasing the ability of an antigenic composition containing a human ~~Respiratory~~ respiratory syncytial virus (RSV) antigen to elicit ~~the an~~ an immune response to said antigen in of a vertebrate host, which comprises administering to said host an antigenic composition of claim 149.

Claim 181 (Canceled)

Claim 182 (Currently amended): The method of claim ~~181~~ 180, where the RSV antigen is the RSV fusion (F) protein.

Claim 183 (Currently amended): A method for increasing the ability of an antigenic composition containing an RSV antigen to elicit cytotoxic T lymphocytes responses in a vertebrate host, which comprises administering to said host an antigenic composition of claim 149.

Claim 184 (Canceled)

Claim 185 (Currently amended): The method of claim ~~184~~ 183, where the RSV antigen is the RSV fusion (F) protein.